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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,480	11/27/2001	Hung-Liang Chiu	CHI3010/EM	7114

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EXAMINER

SANTOS, PATRICK J D

ART UNIT PAPER NUMBER

2171

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/993,480	Applicant(s) CHIU ET AL.	
	Examiner Patrick J Santos	Art Unit 2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 1-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-5 are objected to because of the following informality: Claim 1, ln. 20 has a spurious "and. "The line, "an XML parser interface for parsing the received XML based schedules; and" should read, "an XML parser interface for parsing the received XML based schedules;". Dependent claims 2-5 inherit same deficiency from Claim 1. Appropriate correction is required.

2. Claims 4-5 are objected to because of the following informalities.

- Claim 4, ln. 5, has the word, "from" incorrectly spelled as, "form."
- Claim 4, ln. 13, had the word, "pair" incorrectly spelled as "pari."

Examiner interprets the above informalities as minor typographical errors. Dependent claim 5 inherits same deficiency from Claim 4. Appropriate correction is required.

2/1/4

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication US2001/0009033 A1 by Morisaki et al. (hereafter Morisaki '033), in view of the publication, "Standardized Electronic Forms Information Interchange: Pilot Project

Summary Report” by Osipenko, published by the Electronic Document Standards Working Group (EDSWG) Treasury Board Secretariat, Government of Canada, 1996 (hereafter Osipenko '96), in further view of U.S. Patent No. 6,631,379 issued to Cox (hereafter Cox '379), and moreover in view of the publication, “Guidelines for using XML for Electronic Data Interchange” by Martin Bryan, published by the XML/EDI Working Group, 1998 (hereafter Bryan '98).

Claim 1:

Regarding Claim 1, Morisaki '033 discloses a database containing EDI data.

Specifically, Morasaki '033 discloses:

- a central processing unit connected to a database of EDI based schedules and arranged to receive schedules from each original equipment manufacturer (Morasaki '033: Fig. 1; para. [0120]);
- wherein the central processing unit is further arranged to integrate the schedules with the EDI based schedules stored in the database (Morasaki '033: Figs. 1 and 12-13; para. [0120]); and
- a conversion interface for converting the received schedules with the schedules stored in the database (Morasaki '033: para. [0045] – note that “the interface for data access stored by the object management 4 corresponds to a method for accessing a database, sequential file, etc., stored in an auxiliary storage device” which reads on a conversion function.).

However, Morasaki '033 does not disclose that

- the received schedules are XML based; or
- the received schedules are converted to EDI from XML.

Furthermore, Morasaki '033 does not disclose:

- an XML parser interface for parsing the received XML based schedules.

Osipenko '96 discloses a DTD specifying an EDI service agreement. Specifically,

Osipenko '96 discloses:

- the schedules that are XML based (Osipenko '96: Appendix B, Service Agreement DTD); and
- converting schedules to EDI from XML (Osipenko '96: Appendix B, Service Agreement DTD).

However, Osipenko '96 does not specifically disclose:

- an XML parser interface for parsing the received XML based schedules.

Cox '379 discloses an XML data loader. Specifically, Cox '225 discloses an XML parser interface for parsing the received XML based schedules (Cox '379: col. 3, ln. 58 to col. 4, ln. 7).

Bryan '98 discloses development guidelines for using XML and EDI. Specifically, Bryan '98 discloses: a management system for parsing and receiving XML based schedules being established between a computer system of a product manufacturer and that of at least one original equipment manufacturer through the Internet so that the product manufacturer is capable of receiving the XML based schedules from each original equipment manufacturer through the Internet, the computer system of the product manufacturer (Bryan '98: Section 3, subsection titled, "Business-to business Electronic Data Interchange" and Section 2, subsection titled, "The standards involved in XML/EDI"). These development guidelines provide motivation to combine.

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It would have been obvious to a person having ordinary skill in the art to apply the EDI DTD of Osipenko '96 to the Morasaki '033 database as per the Bryan '98 teachings. The motivation to combine is suggested by Bryan '98 which enumerates the advantages of using XML, including the ability to use Internet transport (Bryan '98: pp. 9-10, section titled, "Why use XML").

It would have been further obvious to a person having ordinary skill in the art to apply the XML data loader of Cox '379 to the Morasaki '033, Osipenko '96, and Bryan '98 combination. The motivation to combine is suggested by Cox '379 which discloses that the loader of Cox '379 is a particularly advantageous way to load XML data, such as that of Osipenko '96 into a database such as Morasaki '033, as motivated by Bryan '98 (Cox '379: col. 3, lns. 14-55)

Claim 2:

Regarding Claim 2, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination disclose all the limitations of Claim 1 (supra). Additionally, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination further disclose: wherein the XML parser interface analyze a correctness of each element of the received XML based schedule based on an XML syntax and a nested structure rule an parse data from the XML based schedule (Cox '379: col. 3, ln. 58 to col. 4, ln. 7). Specifically, the SAX XML parser incorporated by the Cox '379 disclosure fully reads on this limitation.

Claim 3:

Regarding Claim 2, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination disclose all the limitations of Claim 2 (supra). Additionally, Morasaki '033,

Osipenko '96, Cox '379, and Bryan '98 in combination further disclose: wherein the conversion interface converts parsed data (Morasaki '033: paras [0044], [0045], and [0046]; Fig. 1) in the XML based schedule (Cox '379: col. 3, ln. 58 to col. 4, ln. 7) into the EDI based document (Osipenko '96: Appendix B, Service Agreement DTD).

Claim 4:

Regarding Claim 4, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination disclose all the limitations of Claim 3 (*supra*). Additionally, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination further disclose: wherein the response to the regular receiving of the XML based schedule in the product manufacturer from each original equipment manufacturer the central processing unit in the computer system of the product manufacturer is commanded by the management system (Cox '379: col. 5, lns. 28-35) to perform the steps of:

- reading XML based forecast schedules sent from the computer of each original equipment manufacturer (Cox '379: col. 5, lns. 36-55; and Osipenko '96: Appendix B, Service Agreement DTD);
- causing the XML parser interface to parse the XML based forecast schedules based on an XML syntax and a related nested structure rule contained in the XML parser interface (Cox '379: col. 5, lns. 36-55; Morasaki '033: paras. [0057], [0059], [0061], and [0062] – note that the object oriented model of the Morasaki '033 data access layer causes a data access interface processes inputs as needed by the particular persistence format.);
- analyzing the XML based forecast schedule for determining whether it complies with the XML syntax and the nested structure rule (Cox '379: col. 5, lns. 36-55);

- searching a pair of markups of an element in the XML based forecast schedule and reading text and data enclosed by the pair of markups if a result of the analysis step is positive (Cox '379: col. 5, lns. 36-55);
- causing the EDI conversion interface to convert read text and data into the EDI based document based on rules contained in the EDI conversion interface (Cox '379: col. 5, lns. 36-55; and Osipenko '96: Appendix B, Service Agreement DTD; <Morasaki>); and
- storing the EDI based document in the database for integration with the stored EDI based documents therein (Cox '379: col. 5, lns. 56-67; and Morasaki '033: Figs. 1 and 12-13; para [0120]; Morasaki '033: paras. [0057], [0059], [0061], and [0062] – note that the object oriented model of the Morasaki '033 data access layer causes a data access interface processes inputs as needed by the particular persistence format).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in view of U.S. Patent No. 5,265,103 issued to Brightwell (hereafter Brightwell '103), and in further view of the publication, "The Windows (TM) Interface, An Application Design Guide," published by Microsoft Press, 1992 (hereafter Microsoft '92).

Claim 5:

Regarding Claim 5, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination disclose all the limitations of Claim 4 (supra). However, Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 in combination do not explicitly disclose displaying an error message and creating a packet for requesting the computer of the original equipment

manufacturer to send the XML based forecast schedules again if the result of the analysis step is negative.

Brightwell '103 discloses a data communications system capable of retransmitting in event of error. Specifically, Brightwell '103 discloses: wherein the computer system of the product manufacturer is further arranged to create a packet for requesting a computer of the original equipment manufacturer to send the XML based forecast schedules again if the result of the analysis step is negative (Brightwell '103: col. 6, lns. 44-68). However, Brightwell '103 does not explicitly disclose displaying an error message.

Microsoft '92 discloses displaying an error message (Microsoft '92: pp. 41-42, Section titled, "Textual Feedback").

It would have been obvious to a person having ordinary skill in the art to apply the retransmission mechanism of Brightwell '103 with the Morasaki '033, Osipenko '96, Cox '379, and Bryan '98 combination. The motivation to accomplish said application is suggested by Brightwell '103 which teaches the desirability of recovering from transmission errors and that Brightwell '103 accomplishes this in a particularly advantageous way (Brightwell '103: col. 1, lns. 22-26).

It would have been further obvious to a person having ordinary skill in the art to apply the error message of Microsoft '92 to the Morasaki '033, Osipenko '96, Cox '379, Bryan '98, and Brightwell '103 combination. The motivation to accomplish said application is suggested by Microsoft '92 which teaches the user interface principles of "feedback" and "forgiveness" i.e. that users should be notified of error conditions errors (Microsoft '92: pp. 4-5, sections labeled "Feedback" and "Forgiveness").

Response to Arguments

6. Applicant's arguments filed 11 May 2004 have been fully considered but they are not persuasive. Applicant's arguments are addressed as follows:

Applicant Argument 1:

Applicant Asserts:

The Cox '379, Bryan '98, Osipenko '96, and Morisaki '033 references do not disclose parsing XML manufacturing schedules and converting to EDI documents.

Examiner Responds:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Specifically, note that the Morasaki '033 reference discloses an object oriented means of managing business rules and data access (Morasaki '033: Abstract). The point of doing so was to allow the benefits of object-oriented techniques, including encapsulation and extensibility, to be brought to bear for ERP systems (Morasaki '033: paras. [0007] and [0005]). Additionally note that Morasaki '033 supports having a data access object manage loading logic, which includes format conversions (Morasaki '033: para. [0045], see also paras. [0044], [0046], and

[0047]). A person having ordinary skill in the art, faced with the problem with supporting XML interfacing to EDI would have been motivated to modify the data object of Morasaki '033 by adding an XML parser such as Cox '379, and a XML/EDI DTD such as that of Osipenko '96. In fact, the XML parser of Cox '379 was explicitly intended to be portable to an arbitrary application (Cox '379: Abstract; col. 3, lns. 48-55), and is able to support external DTD's such as Osipenko '96. Finally, the motivation to modify Morasaki' 033 to support XML to EDI conversion via Cox '379, and Osipenko '96, is articulated normatively by Bryan '98.

Applicant Argument 2:

Applicant Asserts:

The Brightwell and Microsoft references further do not disclose parsing XML manufacturing schedules and converting to EDI documents.

Examiner Responds:

Cox '379, Bryan '98, Osipenko '96, and Morisaki '033 in combination disclose parsing XML manufacturing schedules and converting to EDI documents as described in Examiner response to Applicant Argument 1 (supra).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J Santos whose telephone number is 703-305-0707. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patrick J.D. Santos
August 31, 2004



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